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ABSTRACT

The Primary Language Development Component, funded under Title I of the 1965 Elementary Secondary Education Act, served 3150 pupils, kindergarten through grade three. The purpose of the Columbus Public Schools in planning the language component was based on the assumption that the language of disadvantaged children prevents their dealing successfully with the school program. The Language Development Component was designed to extend the communicating skills of speaking, listening, reading, and writing so that component participants might attain the educational level appropriate for children of their age and grade level. The program was implemented directly through special instructional services and activities in the language skill areas. Other efforts to achieve the program goal were directed toward home and parent involvement, and toward in-service programs for component teachers. Language development units established in eligible elementary schools consisted of three or four regular kindergarten or primary classroom teachers and one language development teacher. Each unit served up to 35 children, for approximately 60 minutes per day, 5 days a week. Two to four such units functioned in each school. (Author/JM)

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EVALUATION REPORT

LANGUAGE DEVELOPMENT COMPONENT: PRIMARY UNIT

1970-71

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VD012163

PRIMARY LANGUAGE DEVELOPMENT COMPONENT

1970-71

ABSTRACT

Pupils	3150
Schools	47
Teachers	90
Cost	$1,584,700

Description The Primary Language Development Component served 3150 pupils, kindergarten through grade three. Funding of the component was made available through the Title I Elementary and Secondary Education Act of 1965.

The purpose of the Columbus Public Schools in planning the language component was based on the assumption that the language of disadvantaged children prevents their dealing successfully with the school program. The Language Development Component was designed to extend the communicating skills of speaking, listening, reading and writing so that component participants might attain the educational level appropriate for children of their age and grade level. The program was implemented directly through special instructional services and activities in the language skill areas. Other efforts to achieve the program goal were directed toward home and parent involvement, and toward in-service programs for component teachers.

Language development units established in eligible elementary schools consisted of three or four regular kindergarten or primary classroom teachers and one language development teacher. Two, three or four such units functioned in each school. The number of units depended upon the concentration of services offered in a particular school.

Each unit served up to 35 children, for approximately 60 minutes per day, 5 days a week.

Ninety language development teachers served in 47 schools. Supportive and supervisory services were provided by eight language development teachers-on-special assignment and one component director.

Three evaluation specialists were assigned to implement and report on evaluation activities at the kindergarten and primary levels.

Time Interval: The component was in operation from September 1970 to June 1971.

Activities: Instructional services in language were provided to pupils who were of average intelligence but were below grade level in achievement.

Implementation of the program was accomplished through daily instructional activities designed to strengthen and extend regular classroom instruction without pursuing the basic textbooks. Emphasis was placed on activities which would increase abilities in differentiating similarities and differences in sound, written symbols, meanings, and the function of language.

Objectives:

Kindergarten:

To facilitate perceptual development of the child
To facilitate development of the child in oral language

Grades 1, 2, 3

To improve underachieving pupils' range of vocabulary
To improve underachieving pupils' reading vocabulary and comprehension skills
To improve underachieving pupils' written language usage skills.

Evaluation Strategy: All kindergarten component pupils participated in the evaluation activities. Pupils from the primary grade levels were selected randomly for participation in evaluation activities. Standardized tests were chosen to assess areas of language development and were administered on a pre- and post-test basis.

Analysis of data included comparison between pre and post-testing for individual pupils and comparisons between pre and post-test group data and test norms.

Results: The Language Development Component for 1970-71 achieved moderate success in realizing its objectives. At the kindergarten level the program had a significant impact on the pupils served. At the primary level, individual performances of pupils at each grade level demonstrated improvement in listening comprehension ability, reading achievement and written language skill. Group data, however showed that large percentages of pupils at each grade level did not attain expected levels of achievement.

Conclusions: The component was somewhat successful in attaining its overall goal to increase the educational achievement of disadvantaged pupils to a level appropriate for their age and grade. Individual achievement scores demonstrated gains that were equal to or greater than average expected gains. However, post test scores remained about a year below normative achievement levels for respective grade levels considered.

Recommendations: Based on the results of the evaluation, the recommendation is made to continue the Primary Language Development Component during the 1971-72 school year with greater emphasis on instruction at the kindergarten and first grade level.

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EVALUATION REPORT
LANGUAGE DEVELOPMENT COMPONENT: PRIMARY UNIT
1970-71

SECTION I - OBJECTIVES OF THE EVALUATION

A. Audiences to Be Served by the Evaluation

The evaluation report for the Primary Language Development Component is directed toward the Ohio State Department of Education, The Columbus Public Schools' Board of Education, and to those administrative and instructional personnel directly involved with planning and implementation of the component.

The report contains a description of the pupils served by the component, the administrative and teaching staff who serve them, and the instructional philosophy and activities with which they are served. It contains information about changes in the achievement level of component participants with a view toward evaluating the effectiveness of current program practices and providing criteria for recommending improvements.

B. Philosophy and Goals of the Component

The Primary Language Development was part of the 1970-71 Title I funded compensatory education program in the Columbus Public Schools. It was designed to help meet identified educational needs of pupils attending selected Title I eligible public and non-public schools in the Columbus Public School District. The study of community, school, and pupil achievement factors had established the following educational needs which provided the basis for program development:

1) The need for early diagnosis and for compensating educational services for elementary school children.

2) The need for special attention to the development of language ability as the basic ingredient for successful school experience.

3) The need for personalized instruction and a multi-teaching approach to instruction for disadvantaged pupils.

The Primary Unit of the Language Development Component provided special instructional services to selected kindergarten, first, second, and third grade pupils. Provision for these special services and activities was based on the assumption that the language of disadvantaged children prevents their dealing successfully with the school program. Language is considered to be the primary instrument of the thinking process, facilitating the encoding and decoding of experiences. Thus, the focus on language in the early school years is intended to enhance language facility and conceptual development, enabling disadvantaged pupils to take advantage of learning opportunities and find success in school.

C. Behavioral Objectives of the Component

Instruction for growth in language ability was based on the assumption that language is a sound-symbol system that makes possible a meaning system, i.e., sounds are combined into patterned arrangements to form words. Words, in turn are arranged meaningfully in phrases, sentences, or paragraphs in a manner designated by the grammar of the language.

Communication through language is seen as a two-way process of producing and consuming messages. The modes for producing messages are speaking and writing, while those for consuming messages are listening and reading. It was the purpose of the Primary Language Development Component to extend the communicating skills of speaking, writing, listening and reading so that the level of educational attainment of disadvantaged pupils might be raised to that appropriate for children of their age and grade.

SECTION II - ORGANIZATION OF THE COMPONENT

A. Schools Served

Participation in the language program was possible for pupils attending schools identified by the incidence of A.D.C. (Aid to Dependent Children), cases to total school enrollment (See Table I). A total of 3,150 disadvantaged public and non-public pupils attending 47 schools were served in kindergarten-primary language units during the 1970-71 school year.

B. Selection of Students

Instructional services were extended in qualifying schools to pupils achieving below age level expectation but appearing to have greater potentiality for increasing language proficiency. Selection of pupils was based on teacher observation and judgment and on achievement data available on Pupil Profile records. Thus, pupils selected for participation were of average intelligence but below grade in achievement usually by at least 6 months.

C. Staff

Ninety teachers served as language development instructors. Their functions were as follows:

1) To assume all duties normally expected by members of the professional teaching staff of the Columbus (Ohio) City School District.

2) To develop with other teachers and other personnel an instructional program appropriate for disadvantaged children and to plan for the articulation of this program with other educational programs in which such children eventually will be enrolled.

TABLE I

NAMES OF PARTICIPATING SCHOOLS AND NUMBER OF PRIMARY LANGUAGE DEVELOPMENT UNITS BY SCHOOL 1970-71 SCHOOL YEAR

School	No.of Units	School	No.of Units	School	No.of Units
Ohio	4	Beck	2	Franklinton	1
Windsor	4	Beatty Park	2	Avondale	2
Fair	3	Reeb	3	Medary	1
Livingston	4	Hubbard	2	Alum Crest	1
Douglas	3	Highland	1	Seibert	1
Main	4	Trevitt	1	Lexington	1
Felton	2	Second	3	Bellows	1
Sullivant	2	Gladstone	2	Maryland Park	1
Lincoln Park	3	Fairwood	2	Clearbrook	1
Weinland Park	3	Pilgrim	2	Eastwood	1
Sixth	2	Chicago	2	Holy Family	1/2
Milo	3	Duxberry Park	1	Sacred Heart	1
Hamilton	3	First	1	St.Aloysius	1/2
Eleventh	3	Fulton	1	St.John	1
Kent	2	Michigan	1	St.Ladislas	1
Garfield	3	Dana	1		

Total Public Schools	42
Total Parochial Schools	5
Total Teachers	90

3) To work with parents in interpreting programs and the opportunities for parent support and participation.

Additional staff necessary at the building level included six program co-ordinators. They were responsible for providing services designed to support and stimulate teaching activities in the language units.

The central administrative staff consisted of a program director, an additional program co-ordinator who served as an assistant to the director, and three evaluation specialists assigned to implement and report on evaluation activities.

D. Staff Development

All language development teachers and program co-ordinators attended six professional growth meetings during the school year. In addition to the general meetings, a large percentage of teachers participated in study teams organized to investigate topics of special concern or interest. Regular classroom teachers whose students were served by the language component were invited to attend both general and special topic meetings that seemed appropriate to their role.

E. Instructional Procedure, Methods, Media

Kindergarten-primary administrative units were established in each elementary building eligible for language development services. (See Table I) Each unit consisted of three or four regular kindergarten or primary teachers and one language development teacher. The ratio between regular and language teachers was determined by the number of kindergarten and primary sections in each building. A separate facility known as the language lab was available to each unit for instructional activities and materials.

The frequency of service for each child, the amount of time per session, group size and teacher load varied, however, the maximum number of children served by one language unit was thirty-five. The amount of pupil time per session averaged approximately 60 minutes per day, five days per week.

SECTION III - EVALUATION PROCEDURES

A. Design for Evaluation of the Component

The emphasis of the evaluation study was on the assessment of academic growth of pupils enrolled in Language Development as measured by standardized achievement tests. Pre-post test performances provided a gauge for determining changes which occurred over an interval of eight months, the time between pupil selection at the beginning of the school year and the subsequent start of program activities and the close of the program near the end of the school year.

All kindergarten pupils enrolled in the program were tested for evaluation purposes. At the first, second, and third grade levels samples of children were selected randomly to participate in the evaluation. The administration of tests was accomplished by the language development teachers serving the classes of pupils selected.

B. Standards for Judging Quality

The objectives of the Primary Language Development Component stated as standards for evaluating program effectiveness are as follows:

KINDERGARTEN

Objective 1. To facilitate perceptual development of the child; such that if successful, the child will be able to identify and classify sensory experiences as measured by the Bettye Caldwell Preschool Inventory.

Objective 2. To facilitate development of the child in oral language; such that if successful, the child will score at or above the 65th percentile on the "associative vocabulary" subtest of the Bettye Caldwell Preschool Inventory.

GRADES ONE, TWO, AND THREE

Objective 1. To improve the level of language development of enrolled pupils; such that if successful, the level of unit enrollees' listening ability, as measured by the Co-operative Primary Listening Subtest, would be improved.

Objective 2. To improve the language development of underachieving pupils; such that if successful, unit enrolled pupils' range of vocabulary and level of comprehension as measured by the California Reading Test or the California Test of Basic Skills, would be improved.

Objective 3. To improve the language development of underachieving pupils; such that if successful, component enrolled pupils' skills in written language usage as measured by the California Language Test would be improved.

SECTION IV - PROGRAM OUTCOMES

A. Opportunities and Experiences Provided

The intent of the Primary Language Development Component was to improve the educational opportunities of disadvantaged children. Efforts to realize this intent were directed toward providing approaches to instruction and choices of content which are better geared to the thinking processes and development of children whose environment is different from typically achieving school-aged children. In order to give the extra help and encouragement necessary for making the most of participating pupils' potential, they were taught for a portion of each day in small-sized groups or individually. Instruction by well qualified language teachers was customized to individual developmental patterns and intellectual needs. Textbooks which served as the basis for instruction in the regular classroom were not pursued in the language labs. Rather, different teaching approaches were employed, such as the Language Experience approach, which capitalizes on the individual child's

language and experiences for extending his skills in listening, speaking, reading and writing. Pre-reading skills associated with auditory and visual perceptual abilities, as well as phonetic and word attack skills were developed and extended in the language program.

Besides the direct emphasis on language growth, efforts were made to involve parents in school activities through classroom observations and discussion groups at school and through visitations by teachers to the homes of pupils. Finally, in-service programs were planned to increase language teachers' understanding and knowledge of children's cognitive development and learning processes and to acquaint them with recent and relevant educational methodology.

B. Student Gains and Losses, Pupil Achievement Data

KINDERGARTEN

Objective 1.

INSTRUMENTATION

The Bettye Caldwell Preschool Inventory (BCPI) was administered. This instrument measures skills such as knowledge of names and parts of body, ability to follow directions, vocabulary, number concepts, drawing shapes, and naming colors.

Administration

All Kindergarten Language Development pupils received the pre-test in October, 1970 and post-test in May, 1971 from the Kindergarten Language Development teachers. A total of 161 pupils received pre- and post-tests.

Analysis

The first analysis is a comparison of pre-test and post-test quartile scores for all pupils. First, raw scores of the BCPI were transformed into percentiles using national norms. Then, the quartile of each pupil on the pre-test and post-test was determined. In Table 2, the quartile each pupil obtained on the pre-test is compared with his quartile on the post-test.

The second analysis is a comparison of 1970-71 results with the 1969-70 results. The percentages above the middle class median on pre- and post-tests are shown graphically in Table 3.

Results

It is clear from Table 2 that the pupils achieved well on the BCPI and nearly all pupils improved their quartile standing. The component was highly successful in achieving Objective 1.

TABLE 2

FALL-SPRING COMPARISONS BY QUARTILE PLACEMENT
FOR KINDERGARTEN PUPILS, BCPI TOTAL SCORE

Quartile	Spring Post-Test			
Fall Pre-Test	1	2	3	4
	14% N=23	27% N=44	30% N=49	14% N=22
	N=0	1% N=1	5% N=8	4% N=7
	N=0	N=0	1% N=1	3% N=5
	N=0	N=0	N=0	1% N=1

Quartile Standing

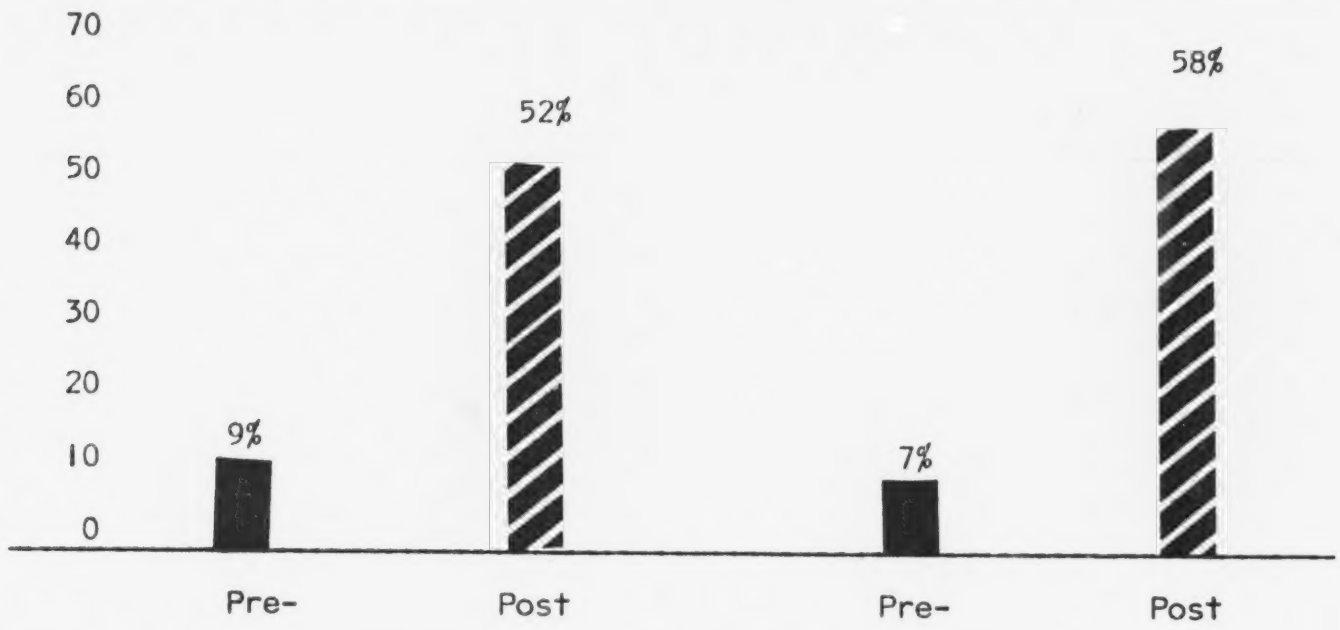
N = 135	Improved	84%
N = 26	Same Quartile	16%
N = 0	Regressed	0
Total N = 161		100%

Quartile 1 = 1st through 25th percentile
Quartile 2 = 26th through 50th percentile
Quartile 3 = 51st through 75th percentile
Quartile 4 = 76th through 100th percentile

The percentages in Table 3 show that the pupils in both years performed about equally well on both pre- and post-tests. A slightly higher percentage of pupils were above the middle class median on the post-test in 1970-71 than the previous year.

TABLE 3

PERCENTAGES OF KINDERGARTEN LANGUAGE DEVELOPMENT
PUPILS ABOVE THE MIDDLE CLASS MEDIAN FOR
PRE- AND POST-TESTS IN 1969-70 AND 1970-71



In summary, a majority of the Kindergarten Language Development pupils achieved Objective 1.

Objective 2.

INSTRUMENTATION

The second sub-test of the BCPI was used to measure this objective. The sub-test is called "associative vocabulary."

Administration

The procedure was the same as for Objective 1.

Analysis

The post-test scores of pupils were divided into two groups--those above the 65th percentile on the associative vocabulary sub-test and those below the 65th percentile.

Another analysis was a comparison between 1969-70 and 1970-71 pupils on Sub-Test 2. The percentage above the 75th percentile in both years was compared.

Results

Just over one-third of those in the component achieved the second objective, which is moderately successful. In order to achieve at or above the 65th percentile, the child has to score 17 or higher on the 26 item sub-test. Table 4 shows the numbers and percentages.

TABLE 4

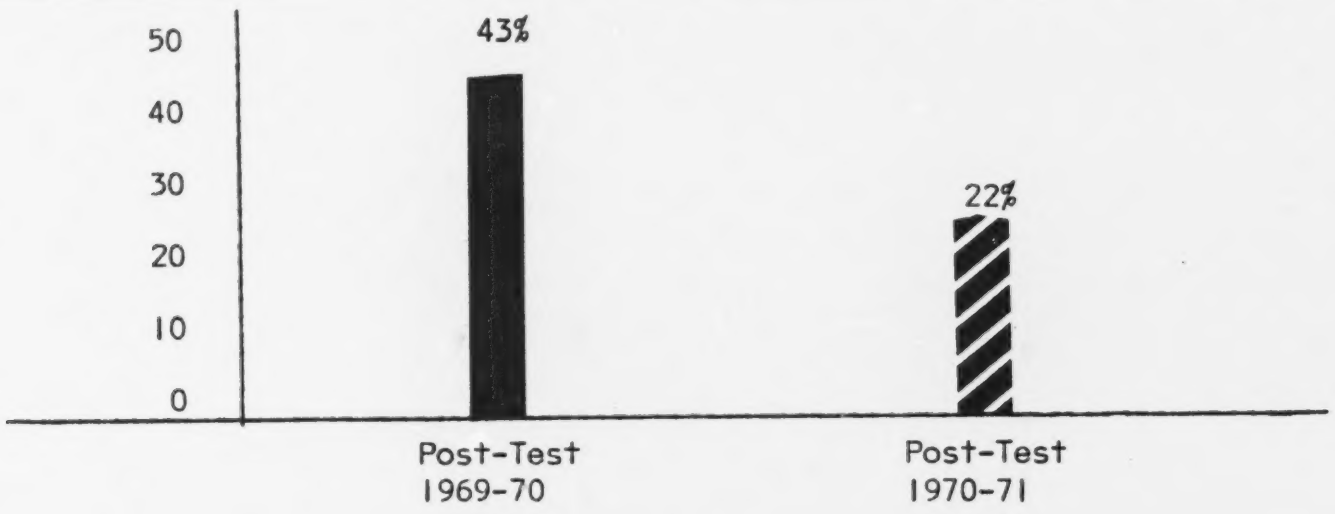
NUMBER AND PERCENTAGE OF KINDERGARTEN LANGUAGE DEVELOPMENT PUPILS ACHIEVING OBJECTIVE 2

Percentile Placement	Number	Percentage
Above 65th	61	34.6
Below 65th	115	65.4
Total	176	100.0

The comparison of 1969-70 and 1970-71 is an interesting one, as shown by Table 5. Although over forty percent of the 1969-70 pupils achieved in the fourth quartile (above the 75th percentile) on the vocabulary sub-test, only twenty-two percent did this in 1970-71. It seems that the 1970-71 component was not as successful with Objective 2 as the 1969-70 component.

TABLE 5

PERCENTAGES OF KINDERGARTEN LANGUAGE DEVELOPMENT PUPILS ABOVE THE 75th PERCENTILE in 1969-70 and 1970-71



To summarize, a third of the 1970-71 pupils achieved the second objective.

GRADES ONE, TWO, AND THREE

Objective 1.

INSTRUMENTATION

The Co-operative Primary Listening Test published by Educational Testing Service was used to assess achievement in the area of vocabulary comprehension. The test measures children's ability to respond to the meanings of words, sentences, and paragraphs. "Listening" includes receiving, comprehending, recalling and interpreting "the spoken word." Two levels of the test were employed in the evaluation design, Form 12A for the end of first grade and the beginning of second grade, and Form 23A for the end of second grade and for third grade.

Administration

The Listening Test was administered by language development teachers to stratified samples of first, second, and third grade pupils in October, 1970 (fall) and May, 1971 (spring).

Analysis

Spring sample data for grade one were compared with normative data. Fall-spring comparisons were made between second and third grade sample and normative data. Fall-spring comparisons by quartile placement determined from normative data were made, also, for second and third grade.

Results

The results of the Co-operative Primary Listening Test are given in cumulative percentiles in Tables 6, 7, and 8 and as quartile joint distributions in Table 9. Table 10 contains pre-post mean and mean change score comparisons between Language Development participants and norming populations.

Table 6 displays fall and spring cumulative percentiles for Columbus first grade program participants, however, normative data was available for comparison at spring only. Cumulative percentage comparisons at spring show that approximately seventeen percent of the Columbus sample performances were above the mid-point of the standardization sample.

Normative data were available for comparisons at both test administrations at the second grade level. Table 7 depicts approximately nine percent of the Columbus second grade sample performances as being above the mid-point of the standardization sample at fall. By spring administration eighteen percent of the sample had achieved performances above the normative mid-point.

TABLE 6

COMPARISONS BETWEEN CUMULATIVE PERCENTAGES FOR SAMPLE AND NORMATIVE DATA FOR CO-OPERATIVE PRIMARY LISTENING TEST 12A, GRADE ONE

Raw Score	Cumulative Percentages			
	Fall		Spring	
	Sample	Norm*	Sample	Norm
44 - 50			1.00	.96
43			.99	.94
42			.99	.90
41			.98	.86
40			.95	.82
38 - 39	1.00		.94	.74
37			.88	.67
36			.85	.58
34 - 35			.83	.50
32 - 33	.99		.73	.40
30 - 31	.98		.63	.30
28 - 29	.94		.52	.22
26 - 27	.86		.47	.15
24 - 25	.79		.35	.11
22 - 23	.66		.27	.08
20 - 21	.51		.20	.04
18 - 19	.34		.12	.03
17	.17		.07	.02
15 - 16	.14		.06	.009
14	.08		.03	.007
12 - 13	.07		.02	.005
10 - 11	.02		.01	.004
9				
7 - 8	.01		.004	.002
6	.01			

N = 219

* Normative date unavailable

TABLE 7

COMPARISONS BETWEEN CUMULATIVE FREQUENCIES OF SAMPLE AND NORMATIVE DATA FOR FALL AND SPRING CO-OPERATIVE PRIMARY LISTENING TEST LEVELS 12A, 23A, GRADE TWO

	Cumulative Percentages				
	Fall 12A			Spring 23A	
Score	Sample	Norm	Score	Sample	Norm
45 - 50			45 - 50		
44			44	1.00	.98
43			43	.99	.96
42	1.00	.88	42		
41			40 - 41	.98	.89
40	.99	.77	39	.96	.83
38 - 39	.98	.68	37 - 38	.95	.76
37	.96	.62	36	.90	.71
36	.93	.53	35	.88	.61
34 - 35	.91	.44	33 - 34	.85	.53
32 - 33	.81	.37	32	.82	.45
30 - 31	.72	.26	30 - 31	.78	.36
28 - 29	.65	.18	29	.67	.31
26 - 27	.50	.12	28	.66	.25
24 - 25	.41	.09	26 - 27	.60	.20
22 - 23	.26	.06	25	.45	.16
20 - 21	.14	.04	23 - 24	.37	.12
18 - 19	.10	.02	22	.20	.10
17			21	.15	.07
15 - 16	.05	.005	19 - 20	.13	.04
14	.02	.004	18	.05	.03
12 - 13	.01	.003	16 - 17	.04	.02
10 - 11			15		
Mean	27.5	34.4		26.9	32.2

N = 169

At the third grade level Table 8 shows that about six percent of the fall Language Development performances were above the mid-point of the standardization population. By spring twenty-two percent of the Columbus sample demonstrated improvement by achieving scores above the normative mid-point.

TABLE 8

COMPARISONS BETWEEN CUMULATIVE PERCENTAGES OF SAMPLE AND NORMATIVE DATA FOR CO-OPERATIVE PRIMARY LISTENING TEST 23A, GRADE THREE

	Cumulative Percentages			
	Fall		Spring	
Raw Score	Sample	Norm	Sample	Norm
49 - 50				
47 - 48			1.00	.99
46				
44 - 45			.99	.92
43			.98	.87
42			.96	.76
40 - 41	1.00	.78	.93	.69
39			.84	.59
37 - 38	.99	.71	.78	.51
36			.65	.45
35	.96	.55	.59	.36
33 - 34	.94	.48	.54	.29
32	.89	.41	.39	.21
30 - 31	.83	.34	.37	.16
29	.74	.29	.26	.13
28	.70	.23	.22	.10
26 - 27	.66	.18	.19	.07
25	.49	.13	.13	.05
23 - 24	.44	.10	.10	.04
22	.26	.08	.03	.03
21	.19	.05	.03	.02
19 - 20	.15	.03	.02	.01
18	.06	.02		
16 - 17	.02	.02	.01	.004
Mean	25.8	33.0	33.4	36.5

N = 116

Further observations of second and third grade sample performances are contained in Table 9 as fall-spring quartile comparison. Quartile placement at fall administration is shown in horizontal rows and at spring in columns. Thus, cells 1.1, 2.2, 3.3, and 4.4 contain percentages of pupils whose scores

fall in the same quartile at both fall and spring administration.

The total percentages of those cells as shown in the summary for Table 9 represent approximately fifty-nine percent of the second grade sample and fifty-one percent of the third grade sample who maintained the same quartile placement throughout the program year. Combined percentages

TABLE 9

FALL-SPRING COMPARISONS BY QUARTILE PLACEMENT,
CO-OPERATIVE PRIMARY LISTENING TEST,
GRADES TWO AND THREE

Quartile			Spring 1	Spring 2	Spring 3	Spring 4
Grade 2 Grade 3	FALL	1	.02 .01	.01 .01	.01	
Grade 2 Grade 3	FALL	2	.03 .02	.02 .04	.03 .01	.04
Grade 2 Grade 3	FALL	3	.05 .04	.02 .09	.05 .06	.08
Grade 2 Grade 3	FALL	4	.01	.03 .14	.12 .17	.50 .40

SUMMARY FOR TABLE 9

	N	Lower Quartile	Same Quartile	Higher Quartile
Grade 2	169	.16	.59	.26
Grade 3	116	.03	.51	.46
Total	285	.10	.56	.34

from cells 2.1, 3.1, 3.2, 4.1, 4.2, 4.3 indicate twenty-six percent of the second graders and forty-six percent of the third graders achieved higher

quartile placements by spring. Sixteen percent of the second graders and three percent of the third graders regressed to lower quartile placements, as depicted by cells 1.2, 1.3, 2.3, 2.4, and 3.4.

The summary chart shows that of the total second and third grade Language Development sample, ten percent showed negative changes in listening ability, fifty-six percent maintained their level of listening ability and thirty-four percent achieved gains.

Tables 6, 7, 8, 9 with accompanying text suggest that Language Development participants at each grade level improved in listening comprehension ability during the school year.

Table 10 contains data for all three primary grades, which suggests developmental trends in disadvantaged pupils' growth in this language area. Comparisons between Columbus' samples and normative average performances at fall and spring and average change scores give information concerning the rate of achievement of Language Development pupils as well as the amount of lag in their educational development.

TABLE 10

MEAN AND CHANGE SCORE COMPARISONS BETWEEN FALL AND SPRING SAMPLE AND NORMATIVE DATA FOR CO-OPERATIVE PRIMARY LISTENING TESTS, LEVELS 12A AND 23A, GRADES ONE, TWO, THREE

		Fall Mean	Spring Mean	Change Mean
Grade 1	Sample	21.4	28.3	6.9
N = 219	Norm	a	33.8	
	Difference		5.5	
Grade 2	Sample	27.5	26.9	b
N = 169	Norm	34.4	32.2	
	Difference	6.9	5.3	1.6
Grade 3	Sample	25.8	33.4	7.6
N = 116	Norm	33.0	36.5	3.5
	Difference	7.2	3.1	4.1

[a]Normative data unavailable for first grade, fall.

[b]Different levels of test used at fall and spring.

Table 10 indicates that pupils in Language Development at the beginning of second grade (fall) have a mean performance on the Co-Operative Primary Listening Test 12A that is comparable to pupils at the end of first

grade (spring). On the average, pupils at the beginning of third grade perform comparably to the second grade average performance at spring. By the end of the school year, or spring, the third grade Language sample has an average performance that compares to the normative third grade fall performance. Despite an average change score (7.6), which is greater than the standardization change score (3.5), Language Development pupils are about a school year behind in their listening comprehension ability.

PUPIL ACHIEVEMENT DATA

Objective 2.

INSTRUMENTATION

The tests used to assess the reading achievement of Language Development pupils are published by the California Test Bureau.

At the first and second grade level, the Reading Test from the California Achievement Tests 70's Series (CAT) was employed. There are two sections of this test, Reading Vocabulary and Reading Comprehension. Vocabulary assesses several word skills associated with beginning reading activities, such as picture vocabulary, discriminating sounds and identifying beginning and ending letters of words, recognizing letters, identifying words by phoneme composition and word meanings. The comprehension section presents stories of increasing length and difficulty followed by multiple-choice items designed to measure the examinee's understanding of the written material.

Third graders were administered the Reading Vocabulary and Comprehension Test from the California Test of Basic Skills (CTBS). Reading Vocabulary consists of 40 multiple choice items. The examinee chooses from among four alternatives a word that means the same or about the same as the underlined word used in the context of the items.

The 45 items in the Reading Comprehension Test measure the pupil's ability to recognize symbols and sound symbol correspondence; to recognize directly stated details; to comprehend the meaning of ideas by simple rewording; to interpret what is read by identifying the main idea.

Administration

Pre-test reading scores for second and third grade sample students were secured from the results of city-wide administration of the CAT and CTBS in October, 1970. Post-test administration was accomplished by language development teachers in May, 1971. The reading test was administered to the first grade sample students by language teachers in January and May, 1971.

Analysis

Pre- and post-test comparisons were made between normative and sample data.

Results

The results of the California Reading Tests are displayed in Figure I as percentages of pupils achieving various change scores.

Change scores based on pre- post grade equivalents were categorized by the Ohio State Department of Education in the following manner for the eight months the program was in effect for between second and third grade pre- and post-test times:

Marked Improvement - 12 or more months achievement growth
Improvement - 9 months to 11.9 months achievement growth
Some Improvement - 5 months to 8.5 months achievement growth
Little or No Improvement - less than 5 months achievement growth.

The January-May test interval indicates a different time unit for the categorization of first grade scores, as follows:

Marked Improvement - 6 or more months achievement growth
Improvement - 4.5 months to 5.5 months achievement growth
Some Improvement - 2.5 months to 4.5 months achievement growth
Little or No Improvement - less than 2 months achievement growth.

Marked improvement was demonstrated by thirty-four percent of the first grade sample (N=96), forty-two percent of the second grade sample (N=210) and twenty-four percent (N=131) of the third grade sample. The combination of the three primary grade samples gives a total N of 417, of which thirty-four percent showed marked improvement in reading achievement.

Falling in the category, Improvement, were three percent of the first grade sample change scores, seventeen percent of the second grade change scores, and fifteen percent of the third grade change scores. The percentage of the combined primary sample scores falling in the Improvement category was thirteen.

Some improvement was indicated by sixteen percent of both first grade and second grade sample scores. Twenty-one percent of the third grade sample scores fell in this change category. Of the total primary sample (417) seventeen percent showed improvement.

The category of Little or No Improvement contained forty-seven percent of the first grade sample scores, twenty-five percent of the second grade sample scores, and forty percent of the third grade sample scores. These numbers represent an average percent of thirty-three of the total primary sample (N=417) showing no improvement in reading achievement.

Information concerning the rate of growth and the level of achievement of Language Development pupils' reading ability is displayed in Table II.

FIGURE 1

PERCENTAGES OF FIRST, SECOND AND THIRD GRADE SAMPLE PUPILS SHOWING IMPROVEMENT AND NO IMPROVEMENT IN CALIFORNIA READING ACHIEVEMENT SCORES

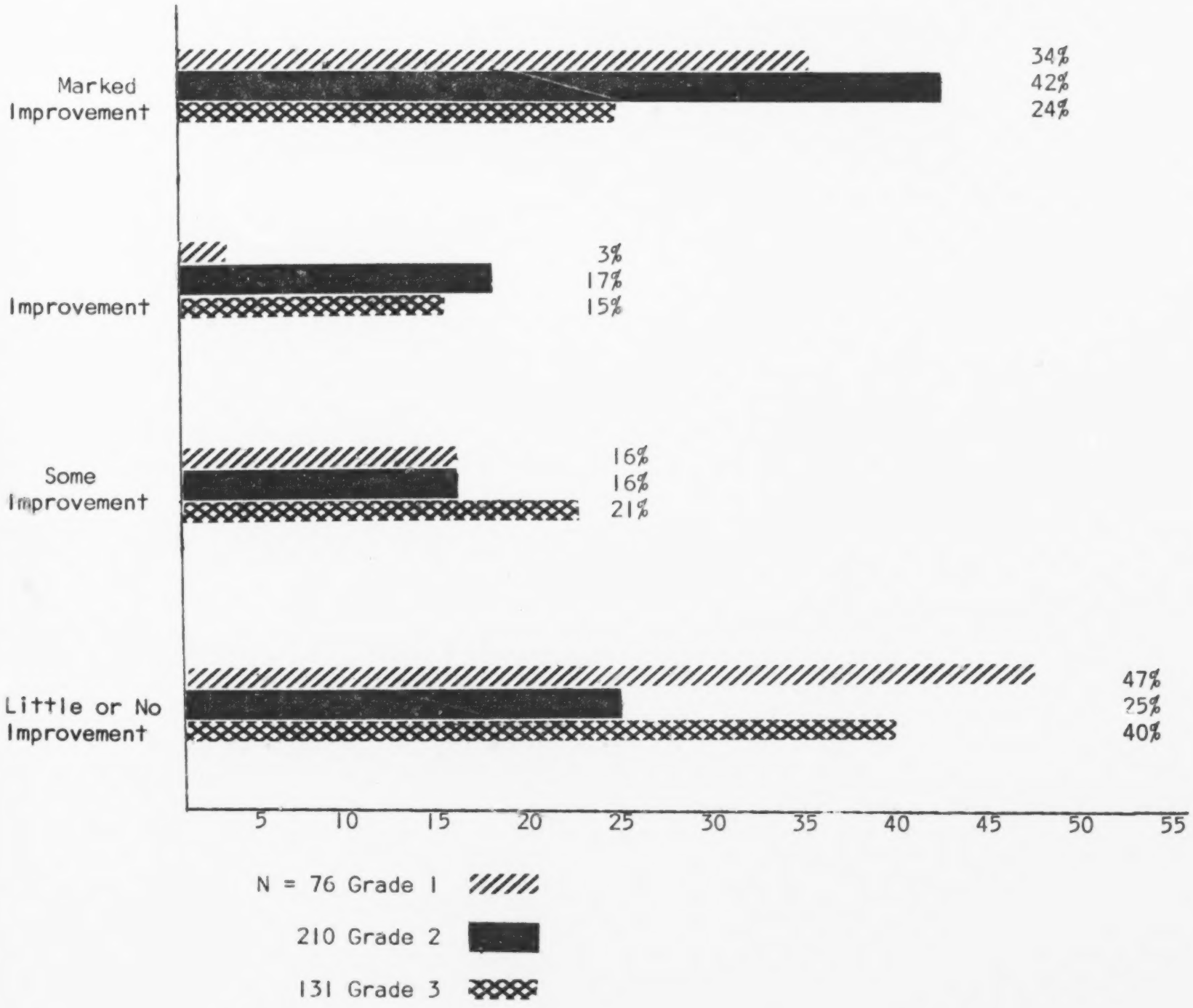


TABLE II

AVERAGE GRADE EQUIVALENTS AND CHANGE SCORES FOR GRADES ONE, TWO, AND THREE; CALIFORNIA READING ACHIEVEMENT TESTS

Reading	N	Pre-Test	Post-Test	Change
Grade 1	76	0.6	0.7	0.1
Grade 2	210	0.7	2.0	1.3
Grade 3	131	1.9	2.7	0.8

A gap in reading ability similar to that suggested by listening scores is demonstrated by average grade equivalent scores in Table II. First graders in January had an average performance of 0.6, a grade equivalent indicative of the median raw score for all students in the norming population in the sixth month of the kindergarten year. By the end of the school year the Language Development first graders had an average performance of 0.7. The same grade equivalent of 0.7 applied to the fall average performance of the second grade sample. By the end of the year second graders showed dramatic growth in reading ability with an average performance of 2.0, however, they remain about a school year behind in reading achievement. The performance of the Columbus third grade sample confirms the idea that language participants gain in academic areas at an average or above rate but do not close the gap between their developmental level and normative expectations. By the end of third grade the average reading performance of disadvantaged pupils was 2.7, approximately a year behind their grade in school. (For further information concerning change scores in listening and reading achievement see Appendix 1 and 2.)

Objective 3.

INSTRUMENTATION

Increases in written language achievement were assessed by the California Language Test (CLT) published by the California Test Bureau. Specific language skills measured by the test are capitalization, punctuation, usage and structure and spelling.

Administration

The Language Test was administered to a sample of third grade Language Development participants by language teachers in October, 1970 and May, 1971.

Analysis

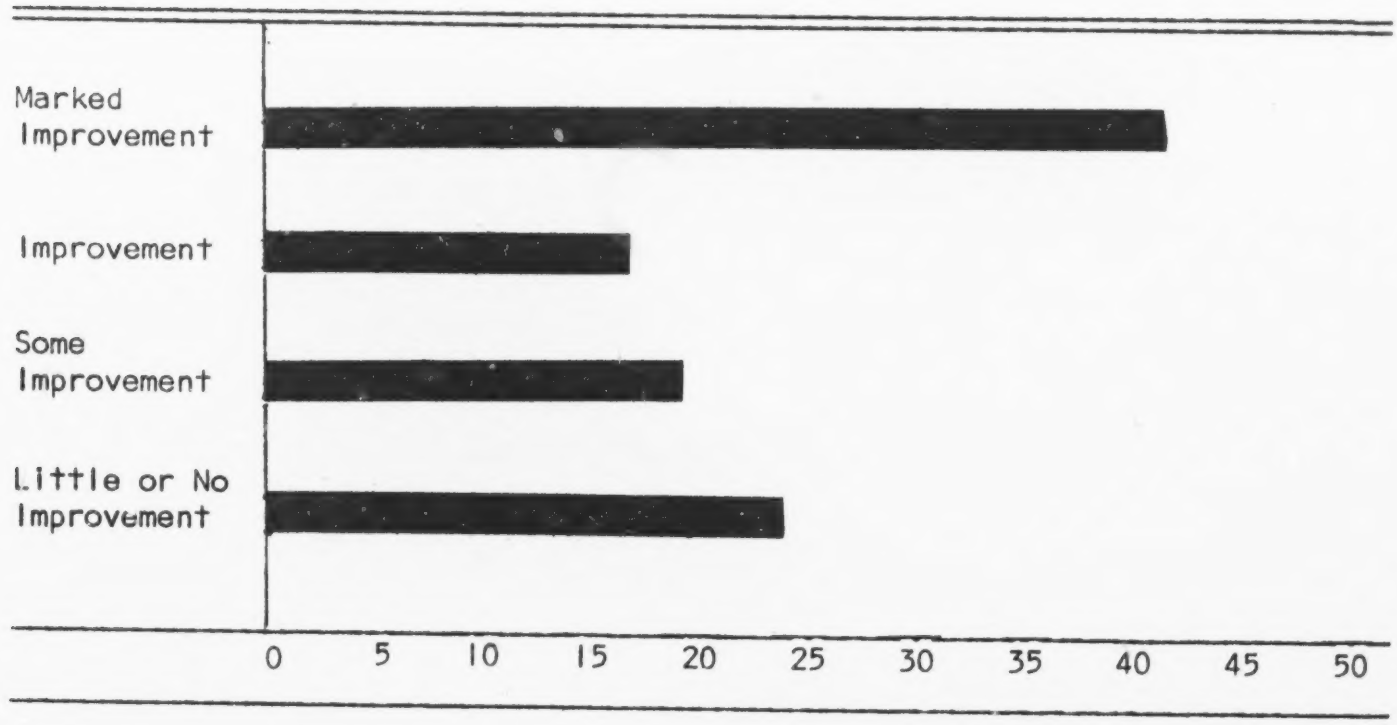
Pre- and post-test comparisons were made between sample and normative data.

Results

The results of the Language Test are displayed in Figure 3 as percentages of pupils achieving various change scores. Change scores were based on pre-post grade equivalents and were assigned to categories in the manner previously noted in this report for second and third grade reading scores. (See page

FIGURE 3

PERCENTAGES OF THIRD GRADE SAMPLE PUPILS SHOWING IMPROVEMENT AND NO IMPROVEMENT IN CALIFORNIA READING AND LANGUAGE ACHIEVEMENT SCORES



Marked Improvement in written language ability was shown by forty-two percent (N=91) of the third grade sample, Improvement by sixteen percent, Some Improvement by nineteen percent. Thus, a total percentage of seventy-seven showed some degree of improvement in written language ability. Little or No Improvement applied to the remaining twenty-three percent of the sample.

C. Summary

The results of the evaluation show that sample pupils participating in the Language Development Component improved to some degree in the areas of language ability measured: listening, reading, and writing. Spring performances on the Co-operative Primary Listening Test indicated that seventeen percent of the first grade sample scores were at or above the median score of the standardization sample. At the second and third grade levels where pre-post test comparisons were made, thirty-four percent of the combined samples performed at a higher quartile at spring than for the fall; fifty-six percent maintained quartile placement over the time interval between tests. Improvement in reading ability, as measured by the California Reading Achievement Test, was demonstrated by sixty-four percent of the total

primary sample. Written language ability assessed with the California Language Test was increased in seventy-seven percent of the sample performances. These improvements in language skills of component pupils indicate some degree of achievement of program objectives.

Also discussed was the question concerning the degree to which the reported improvement had achieved the broader program intent to bring disadvantaged children with potential up to educational levels appropriate for their age and grade. In each language area measured disadvantaged second and third graders achieved gains in raw score or grade equivalents that demonstrated learning rates comparable to those of the standardization sample. At the end of their second or third grade year, however, they had failed to achieve expected levels of performance indicative of their age and grade level.

D. Side Effects and Bonuses

Special efforts of program administrators, co-ordinators, and teachers during the 1970-71 school year were directed toward the implementation of specifically stated behavioral objectives for the Language Development Program. Such objectives provided the basis for improved diagnostic techniques and more individualized instructional approaches. Implementation of behavioral objectives also presumed curriculum content which achieved some much needed direction for teaching personnel.

The past school year also witnessed the installation of the Language Program at the kindergarten level, so that special services to disadvantaged children were extended to reach them earlier in their school careers.

SECTION V - JUDGMENTS OF WORTH

A. Value of Outcomes

The communication skills of pupils served by the Primary Language Development Component were improved. The majority of pupils gained in each language area evaluated.

The kindergarten data presented above demonstrates improved achievement for Kindergarten Language pupils overall, but decreased achievement on the Vocabulary Sub-test. The instruction of kindergarten pupils is successful, but could be improved.

Another consideration, however, is the skill level of the entering pupils in kindergarten. Because the Pre-Reading Program was so successful in pre-kindergarten, many of the children entering kindergarten in 1971-72 will be ahead of their peers in pre-reading skills. Therefore, the task of the kindergarten language teacher may be somewhat different than in the past. She may help some children who did not receive pre-reading instruction to master those skills, while helping the kindergarten teacher to find challenging activities for children already possessing pre-reading skills.

The educational lag of approximately one year noted at each grade level suggests that component pupils during the primary years maintain,

rather than increase, the gap which reportedly accumulates as disadvantaged children progress through the elementary school years.

B. Recommendations

The evaluation study provided information concerning the Primary Language Development Component which led to the following generalizations concerning disadvantaged pupils in Columbus schools:

1. Language Development participants showed improved achievement in all academic areas measured: listening comprehension, reading and written language structure, and usage.

2. Language Development participants demonstrated an average or above rate of achievement.

3. Language Development participants evidenced an educational gap of approximately one year at each primary grade level, despite improvement and average or above rates of achievement.

With these generalizations in mind, recommendations for the program are as follows:

1. The Language Development Component should be continued with more emphasis on instruction at the kindergarten and first grade levels.

2. Co-operative diagnosing and planning between language development teachers and classroom teachers should be intensified.

3. Efforts to develop appropriate curriculum and instructional methodology for disadvantaged pupils should be continued.

APPENDIX I

FREQUENCIES FOR CHANGES IN RAW SCORE POINTS
FOR CO-OPERATIVE PRIMARY TESTS, LISTENING,
GRADES ONE AND THREE

Change in Raw Score Points	Listening Test			
	Grade One (N=219)		Grade Three (N=116)	
	f+	f-	f+	f-
0	9		2	
1	7	4	9	
2	13	5	6	3
3	14	3	3	1
4	15	2	9	1
5	13	5	10	
6	12	3	10	1
7	14	1	7	
8	8	4	10	
9	9	1	7	
10	12	1	7	
11	9		3	
12	9		8	
13	5		6	
14	8	1	5	
15	6		2	
16	2		1	
17	4		2	
18	6		2	
19	6			
20+	8		1	
Mean	7		8	

APPENDIX 2

FREQUENCIES FOR CHANGES IN GRADE EQUIVALENT
SCORES FOR CALIFORNIA ACHIEVEMENT TESTS
GRADES ONE, TWO, THREE

Change Scores in Years, Months	Reading			Language
	Grade 1	Grade 2	Grade 3	Grade 3
	f	f	f	f
2.5+		3	3	2
2.4		1		
2.3		2		2
2.2		2	1	4
2.1			1	3
2.0		4		2
1.9		5	2	
1.8		2	2	2
1.7		5	2	3
1.5		10	2	4
1.5	1	11	3	3
1.4		7	2	4
1.3	2	16	7	3
1.2	3	18	6	6
1.1	3	10	10	9
1.0		7	7	4
0.9	1	19	3	2
0.8	5	10	7	3
0.7	3	8	7	3
0.6	8	12	6	7
0.5	2	4	8	3
0.4	8	13	4	7
0.3	3	6	6	4
0.2	3	8	5	3
0.1	6	8	3	2
0.0	27	17	34	5